SECTION II

WATER RESOURCES

Water Resources is a unit concerned with the development of public policy and the use or misuse of the national water supply. Subsection topics in this unit are general; national water policy; economic and hydrologic data and research; technology; specific purposes; legislation; organization for water resources development; and water rights and water law. Folders consist primarily of government news releases, newspaper clippings, conservation newsletters, and book notices. Documents of exceptional interest or length are mentioned separately. All correspondence is filed with related documents.

General

Folder 31. International Conference on Water for Peace, 1967.

"A Summary of the Current Activities of the Food and Agriculture Organization of the United Nations as Regards the Legal and Institutional Aspects of Water Resources Management," 1975 background paper produced by the Food and Agriculture Organization of the United Nations.

National Water Policy

These papers deal primarily with the records of government commissions and committees and the actions of presidential

administrations from Harry S. Truman to Ronald Reagan. The net effect is a history of national water policy from immediately after World War II through President Reagan's first term.

Folder 32. Water Development--General, 1945-1981.

State Government, Vol. 18, No. 2 (Feb 1945) and Vol. 19, No. 9 (Sep 1946); "Public Power and Flood Control in the Southeast," Dept. of Interior, 1952; Mason Gaffney, "The Federal Role in Water Development," 1960; Irving K. Fox, "Trends in River Basin Development," paper presented to the Ninth National Watershed Congress, 7 May 1962; "Why You Should Be Interested in the Most Effective Use of Water," Water Conservation Conference Continuing Committee, n.d.

Folder 33. Supporting Material for Thesis, n.d.

Handwritten notes by Dr. Maass concerning the development of a national water program.

Folder 34. Recommendations of the Mississippi Valley and Water Planning Committees, 1935.

Folder 35. National Resources Planning Board Subcommittee on National Water Policy, 1940-1941.

Background notes and minutes from the meetings, and correspondence discussing the findings of the subcommittee.

Folder 36. Proposed Legislation, 1944.

Draft of a confidential message from President Franklin D. Roosevelt to Congress urging the passage of bills that would provide for the development and protection of America's water and land resources. There are also two papers by C.D. Curran of the Bureau of the Budget: the first, a presentation before a Budget Bureau Field Service Conference, 18 Sep 1944, "Notes on Federal Functions, Policy, and Problems in Water Resource Utilization and Control"; the second, a compilation of statements made during 1944 by both the President and the Bureau of the

Budget regarding the development of a federal water resources policy.

Folder 37. President's Water Resources Policy Commission (PWRPC), 1950-1953.

Maass, "An Evaluation of the Commission's Recommendations for Administering Water Development," paper presented to the American Political Science Association, 28-30 Aug 1951; Leland Olds, "Who Should Develop Our Water Resources? Federal Responsibility for Water Resources Development," paper presented to the Chamber of Commerce, 29 Apr 1952.

Folder 38. Report of PWRPC Planning and Project Selection Committee, Jul 1950.

Folder 39. Minutes, Interior Department Task Force to Consider PWRPC Report, 29 Dec 1950-1 Mar 1951.

Folder 40. Interior Task Force Review of PWRPC Report, 1950-1951.

Folder 41. PWRPC Recommendations for Legislation, 11 Feb 1952.

Folder 42. Draft, Water Resources Policy Act, 1952.

Folder 43. Budget Circular, Report and Estimates on Federal Water Projects, 1952.

Folder 44. Interior Dept. Comparison of Recommendations, Oct 1954.

A report intended to be an index of the principal recommendations made by various groups, public and private, that have studied water resources problems. Uses the PWRPC report as the basis for comparison.

Folder 45. Eisenhower Administration.

David G. Temple, "Our Evolving National Water Policy," n.d.; David C. Major, "On a Proposal by the Eisenhower Adminis-

tration to Decentralize Control Over Certain Water Resource Investments," n.d.

Folder 46. Senate Select Committee on National Water Resources, 1959-1960.

Indexes to the hearings of the committee and to committee prints. Addresses: Theodore M. Schad, "A Report on the Senate Select Committee on National Water Resources," to the Sanitary Engineering Division Conference of the American Society of Civil Engineers, 6 Jan 1960; Sen. Robert S. Kerr, 19 Feb 1960, before the New York State Waterways Association.

Folder 47. Kennedy and Johnson Administrations.

The final report of the Kennedy-Johnson Natural Resources Advisory Committee, 17 Jan 1961; The White House Special Message on Natural Resources, 23 Feb 1961; drafts of a 1961 executive order on water resources planning and development; The White House Message on Conservation, 1 Mar 1962; remarks of Kermit Gordon, Director of the Bureau of the Budget, before the Committee for Economic Development, 19 Nov 1964; three 1966 addresses by President Lyndon B. Johnson.

Folders 48-49. National Water Commission, 1967-1973.

National Water Commission Hearings before the Interior and Insular Affairs Committee of the Senate, 16-17 May 1966; "Compendium of Recommendations from the Proposed Report of the National Water Commission," Water Resources Council, 20 Nov 1972; the same council's review draft of 18 Jan 1973.

- Folder 50. Nixon and Ford Administrations.
- Folder 51. National Commission on Water Quality, 1974-1976.
- Folder 52. National Conference on Water, 1975.
- Folder 53. Water Resources Council Study, 1974-1976.

Presidential study of major water resources policies prepared in response to the Water Resources Development Act

of 1974. The study manager, Steve Dola, was a student of Dr. Maass and correspondence between the two provides a behind-the-scenes look at the inner workings of the study. A summary report to the President is included, as well as instructions for data compilation and a memo, "Planning Objectives: An Integrated Objective Approach."

Folder 54. Carter Administration.

"Water Resource Policy Study," Water Resources Council, 1977; David C. Major, statement at the National Water Policy Study Hearings, 28 Jul 1977.

Folder 55. Moynihan-Domenici Bill, 1979-1980.

National Water Resources Policy and Development Act of 1979.

Folder 56. Water Implementation Policy, General, 1978-1979.

Guidelines and progress reports on President James E. Carter's Water Implementation Policy Task Force.

Folder 57. Report by the Comptroller General: Review of President's Water Policy Message, 6 Nov 1978.

Folder 58. Report of Water Conservation Task Force, 9 Nov 1978.

Folder 59. Draft, Water Policy Implementation Work Plans, 12 Dec 1978.

Folders 60-61. Water Policy Implementation, Draft Reports, 1978.

Folders 62-63. Water Policy Implementation, Final Draft Reports, 1979.

Folder 64. Water Policy Implementation, Final Reports, 1979-1980.

Folder 65. Reagan Administration.

Economic and Hydrologic Data and Research

This subsection examines the proper foundation on which to base policy decisions. Projections of water demand and investment potential, cost-benefit analyses, planning for multiple objectives, and ongoing research form the core of the material. Of paramount interest are two articles published by Dr. Maass, one in 1966 and the other in 1969, which focus on both the costs and the benefits behind policy decisions.

Folder 66. Water Demand and Capital Investment Projections, 1959-1977.

"Water Resources Developments Capital Investment Values 1900-1975, "Commerce Dept., Jun 1959; "Water Use in the U.S. 1900-1980," Commerce Dept., 1960; Water Resources and Regional Economic Growth in the United States, 1950-1960, Resources for the Future, Jun 1968; a proposal to the Dept. Interior by the Smithsonian Institution, "Survey of Public Attitudes Toward Alternative Future Patterns of Water Resource Use." 15 Nov 1968; Future Water Demands--The Technological Change, Public Policies, and Impacts of Changing Market Conditions on the Water Use Patterns of Selected Sectors of the United States Economy: 1970-1990, Resources for the Future, Mar 1971.

Folders 67-93. Cost-Benefit Evaluations, 1945-1982.

The bulk of this material, approximately five archival boxes, consists of studies and reports on the cost and benefit factors that must be weighed before formulating a national water policy. Although correspondence will be found in most of the folders, the majority of such correspondence relates to the studies and reports filed therein. Folders 78 and 82 are exceptions as they contain Dr. Maass' handwritten notes on the subject. Some of the folders contain issues of the National Waterways Conference newsletter, Criteria News, which provide contemporary information on the government's role in formulating water policy. Folder numbers and significant papers are listed below.

67. Benefits and Costs, Dept. of Interior Reclamation Manual, 7 Feb 1950; "Value of Water for Irrigation in the Roaring Fork Basin of Colorado," USDA Bureau of Agricultural Economics and Colorado Agricultural Experiment Station, May 1950; M.M. Regan and E.L. Greenshields, "Benefit-Cost Analysis of Resource Development Programs," Journal of Farm Economics, Vol. 33, No. 4 (Nov 1951); "The Reclamation Program: A Survey of the Application of the Interest Component," n.d.

- 68. James C. Battie, Mark J. Rogers, and Ellis T. Williams, "A Critique of Procedure for Calculation of Benefit-Cost Ratios and of Benefit Claims in Certain Department of Agriculture Reports Recommending Programs for Waterflow Retardation and Soil Erosion Prevention," 5 May 1952; Report of Panel of Consultants on Secondary or Indirect Benefits of Water-Use Projects to Michael W. Straus, Commissioner, Bureau of Reclamation, 26 Jun 1952; Robert B. River, "Benefit-Cost Evaluation as a Criterion for Federal Resource Development," M.A. thesis, University of California, Jul 1952; Report of the House Subcommittee to Study Civil Works, "The Allocation of Costs of Federal Water Resource Development Projects," 5 Dec 1952.
- 69. Charles D. Curran, "The Reclamation Program and the Interest Component," The Library of Congress, Legislative Reference Service, 4 May 1953; Mark M. Regan and John F. Timmons, "Current Concepts and Practices in Benefit-Cost Analysis of Natural Resource Developments," address to the American Association for the Advancement of Science, 27 Dec 1954; Julius Margolis, "Secondary Benefits, External Economies, and the Justification of Public Investment," The Review of Economics and Statistics, ca. 1957-1958; "Arkansas-White-Red Survey Policy Problems," n.d.
- 70. Robert W. Harrison, Evaluation and Cost-Sharing in National Resource Development Programs, International Land Surveys and the Farm Economics Research Division, USDA, 1962; Stephen A. Marglin, "The Social Rate of Discount and the Optimal Rate of Investment," Society of Fellows, Harvard University, May 1962 [also Quarterly Journal of Economics, Vol. 77 (Feb 1963)]; memo to the White House from the Secretaries of the Army; Interior; Agriculture; and Health, Education, and Welfare, "Policies, Standards, and Procedures in the Formulation, Evaluation, and Review of Plans for Use and Development of Water and Related Land Resources," 15 May 1962; Kenneth J. Arrow, "Criteria for Social Investment,"

submission by U.S. delegation, Economic Commission for Europe, meeting of Senior Economic Advisers, 5-9 Nov 1962; Marglin, "The Opportunity Costs of Public Investment," Quarterly Journal of Economics, Vol. 77 (May 1963); Peter O. Steiner, "The Role of Alternative Cost in Project Design and Selection," Quarterly Journal of Economics, ca. 1964; Determination of Area Redevelopment Benefits from Water Resource Projects, Dept. of Commerce, Mar 1964; Irving K. Fox and Orris C. Herfindahl, "Attainment of Efficiency in Satisfying Demands for Water Resources," Resources for the Future, May 1964.

- 71. David C. Major, "Decision-Making for Public Investment in Water Resource Development in the United States," Harvard Water Program, Jan 1965; Stanley Milgram, "Liberating Effects of Group Pressure," Journal of Personality and Social Psychology, Vol. 1, No. 2 (Feb 1965); David Braybrooke, "The Contribution of Management to Public Decision-Making: A Twenty-Year Prospect of Personal Reassignment and Institutional Transformation," Jul 1965.
- 72. David C. Major, "Decision-Making for Public Investment in Water Resource Development in the United States," Jan 1965.
- 73. Timothy King, "Development Strategy and Investment Criteria: Complementary or Competitive?" Quarterly Journal of Economics, Vol. 80 (Feb 1966); remarks by Dr. Maass at the Second Conference on Government Expenditures, Brookings Institution, 15 Sep 1966; J. Hirshleifer and J.W. Milliman, "Urban Water Supply--A Second Look," 30 Nov 1966; Aaron Wildavsky, "The Political Economy of Efficiency: Benefit Analysis, Systems Analysis, and Program Budgeting," Public Administration Review, Vol. 26, No. 4 (Dec 1966); S.V. Ciriacy-Wantrup, "Water Policy and Economic Optimizing: Some Conceptual Problems in Water Research," presented to Annual Meeting, American Economic Association, 27 Dec 1966; Maass discussion of Ciriacy-Wantrup paper, same meeting, same date; A. Allan Schmid, "Nonmarket Values and Efficiency of Public Investments in Water Resources," same meeting, same date; A. Myrick Freeman III, "Income Distribution and Planning for Public Investment," American Economic Review, ca. 1967.
- 74. "Task Statement for the Design of an Information System for the Bureau of the Budget," 26 Jan 1968; "Dossier on Cost

Benefit Analysis in the Public Sector," Treasury Management Accounting Unit, May 1968; Hearings before the Subcommittee on Economy in Government, "Economic Analysis of Public Investment Decisions: Interest Rate Policy and Discounting Analysis," 30-31 Jul and 1 Aug 1968; Report of House Subcommittee on Economy in Government, "Economic Analysis of Public Investment Decisions: Interest Rate Policy and Discounting Analysis," 23 Sep 1968.

75. Goran Wideback, "A Model of Budgeting," Center for Research in Management Science, University of California, Berkeley, Aug 1966; Martin C. McGuire and Harvey A. Garn, "An Experiment in the Integration of Equity and Efficiency Criteria in Public Project Selection," 1968; Emery N. Castle and Russell C. Youmans, "Economics in Regional Water Research and Policy," Journal of Agricultural Economics, Vol. 50, No. 5 (Dec 1968).

Burl F. Long, "Concepts and Theoretical Basis for Evaluation of Secondary Impacts"; Walter G. Miller and James E. Osborn, "Secondary Effects of Land and Water Depletion"; Clyde E. Stewart, "Secondary Benefit Evaluations in Federal Reclamation Programs"; William H. Heneberry, "Evaluation of Secondary Benefits from the Accelerated Watershed Program in Appalachia"; Neil R. Cook, "Review of Regional Studies of Harrison, Distribution"; Robert "The Secondary Effects in Project Formulation Justification and Evaluation for the Appalachian Water Resources Survey"; Dwight M. Gadsby, "Current Procedures Used in Evaluating Resource Conservation and Development Projects"; W.B. Back, "Appraisal of Regional, Interregional, and National Effects of Resource Development by Interindustry Analysis"; Melvin D. Skold and Arthur J. Greer, Jr., "Estimating the Impact of Individual Resource Development Projects in Local Areas by Interindustry Analysis"; Jay C. Anderson and Lynn W. Wilkes, "The Consideration of Secondary Impacts in Comprehensive Studies of the Pacific Southwest Water Resource Regions"; P. Thomas Cox, "Statistical Analyses of Growth and Development in Project Areas or Potential Project Areas"; Roger W. Strohbehn, "Computer Simulation of a Socio-Physical System"; Gary C. Taylor, "Relating Economic Evaluation of Federal Resources Programs to Political Objectives and Social Values"; M.L. Weinberger, "Concepts and Objectives Underlying the Evaluation of Secondary Effects of Natural Resource Development." All of these studies are dated 1968.

77. Report to the Water Resources Council by the Special

Task Force, "Procedures for Evaluation of Water and Related Land Resource Projects," Apr 1969; Martin C. McGuire and Henry Aaron, "Efficiency and Equity in the Optimal Supply of a Public Good," Brookings Institution, Apr 1969, reprinted from Review of Economics and Statistics, Vol. 51, No. 1 (Feb 1969); Sen. Henry M. Jackson, "Resources Management: Choices and Consequences," address before the Western Water Congress, 8 Apr 1969.

- 78. Jack L. Knetsch, Robert H. Haveman, Charles W. Howe, John V. Krutilla, and Michael F. Brewer, Federal Natural Resources Development: Basic Issues in Benefit and Cost Measurement, Natural Resources Policy Center, George Washington University, May 1969; Jim J. Tozzi, "Establishing Priorities for Public Investments," Systems Analysis Group, Office of the Secretary of the Army, Jun 1969; David C. Major, "Benefit Cost Ratios for Projects in Multiple Objective Investment Programs," 1969; A. Allan Schmid, "Effective Public Policy and the Government Budget: A Uniform Treatment of Public Expenditures and Public Rules," n.d.
- 79. Jack W. Carlson, "Water Resource Investments and National Goals," address before the Third Western Interstate Conference, 26 Aug 1969; Criteria for Federal Evaluation of Resource Investments, Water Resources and Marine Sciences Center, Cornell University, Aug 1969.
- 80. House and Senate reports on water resources planning and public works for water and power resources development, Jun-Jul 1968.
- 81. "Principles for Planning Water and Related Land Resource Development," Water Resources Council Task Force on Evaluation Procedures, revised draft, 16 Jan 1970; Maass and David C. Major, "The Objectives of Water Policy and Related Institutional Problems," 13 Apr 1970, prepared for the United Nations Panel of Experts on Water Resources Development Policies, 8-13 Jun 1970.
- 82. A. Myrick Freeman III and Robert H. Haveman, "Benefit-Cost Ratios for Projects in Multiple Objective Investment Programs: A Comment," 1970.

83. "Proposed New Procedures for Evaluating Water and Land Resources: Some Comments from an Academic Viewpoint," University Council on Water Resources; "Principles for Planning Water and Land Resources," Water Resources Council, Apr 1971; Peter Rogers, "Indices for Environmental Quality," Environmental Systems Program, Harvard University, 20 Jun 1971.

- 84. Senate Report on Public Works for Water and Power Development, 30 Jul 1971; Morris L. Weinberger and Howard L. Hill, "Benefit-Cost Relationships in Sediment Control," Economic Research Service, USDA, Aug 1971; Water Resources Council, "Proposed Principles and Standards for Planning Water and Related Land Resources," Federal Register, Vol. 36, No. 245 (21 Dec 1971).
- 85. Benefit-Cost Ratio report from the Chief of Engineers, Dept. of the Army, to Senate Committee on Public Works, 4 Feb 1972.
- 86. Statement by Col. John C.H. Lee, Jr., to the Water Resources Council on an optimum method of cost allocation and cost sharing applicable to multiobjective water resources planning, 20-21 Mar 1972; statement by Harry N. Cook, Executive Vice President, National Waterways Conference, at public hearing on proposed water resources evaluation standards, 21 Mar 1972.
- 87. Statement by Dr. Maass at public hearing on proposed water resources evaluation standards, 21 Mar 1972; David Simpson and Susan Scott, "Efficiency in Public Spending: A New Approach," Feb 1972; Appendix A to "Preliminary Instructions for Following Proposed Guidelines," 10 Aug 1972.
- 88. "Harvard University Program on Technology and Society: A Final Review," 1972; Steven Dola, "The Evolution of a Funding Policy," ca. 1972; Arnold C. Harberger, "Three Basic Postulates for Applied Welfare Economics: An Interpretive Essay," Journal of Economic Literature (ca. 1972); Maass and David C. Major, "Budget Constraints and Multiobjective Planning," Engineering Issues--Journal of Professional Activities, Proceedings of the American Society of Civil Engineers, Vol. 98, No. PP3 (Jul 1972).

- 89. Personal notes.
- 90. Charles J. Cicchetti, Robert K. Davis, Steve H. Hanke, and Robert H. Haveman, "Evaluating Federal Water Projects: A Critique of Proposed Standards," Science, Vol. 181 (24 Aug 1973); Water Resources Council, "Water and Related Land Resources: Establishment of Principles and Standards for Planning," Federal Register, Vol. 38, No. 174 (10 Sep 1973); David C. Major, "Evaluating Federal Water Projects: Comment," n.d., ca. 1973.
- 91. Testimony of Dr. David C. Major, Associate Professor of Civil Engineering, Massachusetts Institute of Technology, before the Subcommittee on Water Resources of the Senate Committee on Public Works, 27 Jun 1974.
- 92. John V. Krutilla, "The Use of Economics in Project Evaluation," Resources for the Future, reprinted from Transactions of the 40th North American Wildlife and Natural Resources Conference, 1975; Robert Dorfman, "Forty Years of Cost-Benefit Analysis," Aug 1976; Gautam Pingle, "The Early Development of Cost-Benefit Analysis," Journal of Agricultural Economics (Jan 1978); Water Resources Council, "Procedures for Evaluation of National Economic Development Benefits and Costs in Water Resources Planning and Proposed Revisions to the Standards for Planning Water and Related Land Resources," Federal Register (24 May 1979); Water Resources Council, "Procedures for Evaluation of National Economic Development Benefits and Costs in Water Resources Planning; Final Rule," Federal Register, Vol. 44, No. 242 (14 Dec 1979).
- 93. Personal notes.
- Folder 94. Drafts of Maass Article, "Benefit-Cost Analysis: Its Relevance to Public Investment Decisions," Aug-Sep 1965.
- Folder 95. Maass Article, "Benefit-Cost Analysis: Its Relevance to Public Investment Decisions," Quarterly Journal of Economics (May 1966).
- Folders 96-97. Correspondence regarding QJE Article, 1964-1968.

Folder 98. Reprints of QJE Article, 1969.

Folder 99. Drafts of Maass Article, "Public Investment Planning in the United States: Analysis and Critique," Jan-Apr 1969.

Folder 100. Final Draft of Maass Article, "Public Investment Planning in the United States: Analysis and Critique," Public Policy (Winter 1969).

Folders 101-102. Correspondence Regarding Public Policy Article, 1969-1973.

Folders 103-108. Multiple Objective Planning, 1961-1982.

These papers deal with the many facets of planning that must be considered before formulating public policy. As was the case with the Cost-Benefit Evaluations folders, reports and study papers predominate. Below is a list of the folders and their significant papers.

103. Otto Eckstein, "A Survey of the Theory of Public Expenditure Criteria," National Bureau of Economic Research, Princeton University, 1961; James Q. Wilson, "Planning and Politics: Citizen Participation in Urban Renewal," Journal of the American Institute of Planners, Vol. 29, No. 4 (Nov 1963); Bertram M. Gross, "What Are Your Organization's Objectives?," Human Relations, Vol. 18, No. 3 (1965); The Administration of Economic Development Planning: Principles and Fallacies, United Nations Dept. of Economic and Social Affairs, 1966; Budgeting for National Objectives, Committee for Economic Development, Jan 1966.

104. William C. Mitchell, "The Shape of Political Theory to Come: From Political Sociology to Political Economy," address to the American Political Science Association, 5-9 Sep 1967; "Summarization of Planning Policy Conferences, 2-9 Nov 1967," Army Corps of Engineers; William C. Mitchell, "The New Political Economy," Social Research, Vol. 35, No. 1 (Spring 1968); E.B. Nash and L.M. Hartman, "The Social Basis of Water Resource Institutions: A Game Theory Analysis," Jun 1969; draft statement, "Water Resources Planning and 'The People'--A Preliminary Exploration of the Problems and Procedures Relevant to Public Involvement

in Water Resources Planning," Army Corps of Engineers, Dec 1969.

- 105. David J. Allee, "Efficient Management Policies for Urban Water Supply," remarks at American Society of Civil Engineers Conference, Spring 1970; papers by Norman Wengert while working in the Corps' Institute for Water Research (1970) dealing with public participation in water project planning.
- 106. Henry C. Hart, "The Role of Social Science in Water Resources Management," 1971; David C. Major, "The Impact of the Systems Approach on the NAR Study," remarks at 52d Annual Meeting, American Geophysical Union, 12 Apr 1971; Norman Wengert, "Where Can We Go with Public Participation in the Planning Process?," paper delivered at National Symposium on Social and Economic Aspects of Water Resources Development, 21 Jun 1971; David C. Major, "Multiobjective Redesign of the Big Walnut Project," adapted from the author's paper to the Fourth Australasian Conference on Hydraulics and Fluid Mechanics, Nov-Dec 1971.
- 107. Forming Consumer Organizations, Office of Consumer Affairs, Executive Office of the President, 1972; David C. Major, "Impact of Systems Techniques on the Planning Process," Water Resources Research, Vol. 8, No. 3 (Jun 1972); Don't Leave It All to the Experts: The Citizen's Role in Environmental Decision Making, U.S. Environmental Protection Agency, Nov 1972; Peter Richerson and Robert Johnston, "Environmental Values and Water Quality Planning," Journal of the Hydraulics Division (Feb 1975); Ralph L. Keeney and Eric F. Wood, "An Illustrative Example of the Use of Multiattribute Utility Theory for Water Resource Planning," Water Resources Research, Vol. 13, No. 4 (Aug 1977); William E. Martin, Helen Ingram, and Nancy K. Laney, "A Willingness to Play: Analysis of Water Resources Development," Western Journal of Agricultural Economics (Jul 1982).
- 108. Donald N. Rothblatt, "A Multiple Advocacy Approach to Resolving Metropolitan-Wide Planning Problems: The Case of Expanding Air Transport Facilities for San Jose," presented at the 57th Annual Conference, American Institute of Planners, n.d.; David C. Major, "The Impact of Systems Techniques on the Planning Process," n.d.

Folder 109. Maass Speech at 14th Annual Watershed Congress, 19 Jun 1967.

Folder 110. Maass Speech at National Waterways Conference, 18 Oct 1968.

Folder 111. Maass and David C. Major, "The Objectives of Water Policy and Related Institutional Problems," 15 Dec 1969.

Folder 112. National Water Commission Analysis of the Role of Congress in the Authorization Process, 1970.

Folder 113. Army Corps of Engineers Public Brochures for the Flathead River Flood Control Study, 1971.

Folder 114. Army Corps of Engineers--Water Resources Planning, 1971.

Folder 115. Water Resources Research Institute Papers, Jan 1975.

Henry P. Caulfield, Jr., "The Politics of Multiple Objective Planning"; David C. Major, "An Overview of Multiple Objective Planning."

Folder 116. Water Resource Systems: Design Methods, 1966-1978.

Thomas L. Morin, "Solution of Some Sequencing Problems Encountered in Water Resources Development," Nov 1972; Fumiko Seo, "Waste Disposal and Regional Planning," Kyoto Institute of Economic Research, May 1973; H. Stuart Burness and James P. Quirk, "The Theory of the Dam: An Application to the Colorado River," California Institute of Technology, Aug 1978.

Folder 117. Steven Dola, "Passaic Valley Flood Control," Jun 1965.

Folders 118-119. Basic Hydrological Data, 1949-1981.

"Public Water-Supply Shortages, 1953," Dept. of Interior;

W.B. Langbein, Hydraulic Engineer, U.S. Geological Survey, "Stream Gaging Networks," paper prepared for the 10th General Assembly, International Union of Geodesy and Geophysics, Rome, 1954; The Divining Rod: A History of Water Witching, Dept. of Interior, 1917, reprinted 1957; Benoit B. Mandelbrot and John W. Van Ness, "Fractional Brownian Motions, Fractional Noises and Applications," Siam Review, Vol. 10, No. 4 (Oct 1968); Jack Hockberger, "John Wesley Powell and the Political Crises of the United States Geological Survey, 1890-1892," Senior Honors Thesis, 25 Jan 1974.

Folders 120-122. Research in Water Resources, 1962-1979.

"Bibliography of Current Literature on Water Resources Development and Water Rights (1955-1963), " compiled by Water Resources Center Archives, University of California, Berkeley; testimony of Dr. Maass on water research before the Subcommittee on Irrigation and Reclamation of the House Committee on Interior and Insular Affairs, 14 Feb 1966; Maynard M. Hufschmidt, "The Role of Universities in Water Resources Education: The Social Sciences, paper presented at the annual general meeting of the University Council on Water Resources, 25 Jul 1966; Harry A. Steele, Resource Education," presented at same meeting; Dean F. Peterson, "Federal Organization for Water Resources Research," presented at same meeting; Norman Wengert, "A Political Scientist Looks at Water Resources Research," paper presented at the Institute for Research on Land and Water Resources colloquium on the Social Sciences in Water Resources Research, Pennsylvania State University, 4 Jun 1968; Social Science Data Banks and the Institute for Water Resources, U.S. Army Engineer Institute for Water Resources, Jul 1974.

Folder 123. "Water Resources in the Resources for the Future Program," Mar 1964.

Folder 124. Office of Water Resources Research Evaluation, 1965-1966.

Folders 125-126. University Council on Water Resources Newsletters, 1966-1978.

Folder 127. Natural Hazard Research, 1970-1983.

President Nixon's message to Congress establishing the Environmental Protection Agency and the National Oceanic and Atmospheric Administration, 9 Jul 1970.

Folder 128. Harvard Water Program, 1965-1974.

Maynard M. Hufschmidt, "The Harvard Program: A Summing Up," 1965; Hufschmidt, "The Water Resource Planning Process: Relation to Corps of Engineers Planning," Jun 1965; a bibliography of selected publications by members of the Harvard Water Program, 1959-1965; Harold A. Thomas, Jr., "An Overview of Paretian Environmental Analysis," and Grant W. Schaumberg, Jr., "Topics in the Development and Application of Paretian Analysis," 24 Apr 1972.

Technology

This subsection contains information on many post-World War II technological developments. Subjects included are weather control; saltwater conversion; sedimentation; adverse effects of reservoirs; evaporation loss; arid lands research; design process; degradation of lakes; estuaries, coastal zones, and wetlands; and shoreline erosion.

Folder 129. Technology--General, 1962-1982.

H. Anton Keller, "Plowshare--A New Key to Water Resources Development," written for the U.S. Atomic Energy Commission, 31 Jul 1967.

Folder 130. National Research Council Committee on Environmental Regulation and Technological Innovation, 1979.

Folder 131. Weather Control, 1951-1983.

Regulations for U.S. Weather Control Commission, 1952; first interim report of the Advisory Committee on Weather

Control, Feb 1956; Frederick A. Berry, "The Evaluation of Weather Modification Experiments," Journal of the American Water Works Association, Vol. 48, No. 8 (Aug 1956); Jack C. Oppenheimer, "Technical Report No. 6: Legal Situation," Advisory Committee on Weather Control, ca. 1957; Oppenheimer, "Policy Considerations in Weather Modification," State Government, May 1957; Stanley A. Changnon, Jr., "Weather Modification: Winners and Losers," Water Spectrum (Spring 1980); Jamie K. Hartshorn, "Weather and Water," Western Water (Nov-Dec 1982); Howard T. Orville, "The Effects of Weather Modification on Water Supplies," n.d.

Folders 132-133. Saltwater Conversion, 1952-1981.

"Survey Report: Saline Water Conversion Program," Dept. of Interior, Nov 1958; Gilbert F. White, "We're Talking Ourselves Into a Water Crisis," Look (11 Sep 1962); Milton A. Chase, "Electric Power and Water Desalting," Public Power (Aug 1965); Gale Young, "Dry Lands and Desalted Water," Science, Vol. 167, No. 3917 (23 Jan 1970); William H. McCoy, "Desalting: An Offer You May Not Refuse," Water Spectrum (Spring 1980).

Folder 134. Sedimentation, 1950-1959.

"Survey Exonerates Hoover Dam Engineers: 275-Year Future Forecast," Christian Science Monitor (26 Jun 1950); address by W.G. Sloan before the Missouri Basin Inter-Agency Committee Meeting, 29 Jun 1950, "The Silt Problem in the Missouri River Basin."

Folder 135. Reservoirs, Adverse Effects, 1950-1959.

"Local Effects of the Wappapello Reservoir, Wayne County, Missouri, with Suggestions for Lessening Undesirable Effects of Reservoirs," Missouri Division of Resources and Development, Feb 1950; "Probable Economic Impacts of Inundation, Proposed Hopkinton-Everett Reservoir, Merrimack River Basin, New Hampshire," USDA Field Committee for New England-New York, Jul 1952; Reducing Adverse Effects of Reservoirs, Circular 293, Great Plains Council, Publication No. 6, Oct 1952; TVA Land Acquisition Experience Applied to Dams in the Missouri Basin, Bulletin 432, Great Plains Council Publication No. 9, Aug 1953.

Folder 136. Evaporation Loss Control, 1950-1965.

Folder 137. Arid Lands Research, 1961-1979.

Lora M. Shields and Linton J. Gardner, eds., Bioecology of the Arid and Semiarid Lands of the Southwest, New Mexico Highlands University Bulletin, 1961; "Arid and Semi-Arid Lands as a Focus for Political, Institutional, and Legal Research," project completion report by the Dept. of Political Science, Colorado State University, for the National Science Foundation, Sep 1978; "Working Papers: Workshop on Drought Research Needs," sponsored by the Corps of Engineers' Institute for Water Resources, National Science Foundation, WESTPO Institute for Policy Research, Western Regional Drought Action Task Force, and Western States Water Council, 14-15 Oct 1977; Helen Ingram, Rosemary Nichols, Anne Gault, and Patricia Rosenfield, "Management of Arid Lands: An Agenda for Research," Resources for the Future, n.d., ca. 1979.

Folders 138-139. Design Process, 1963-1974.

"Rational Choice in Water Resources Hubert Marshall, Irving K. Fox, "Statement to Senate Planning," 1964; Committee on Public Works on Water Resources and the U.S. Economy, " 22 Mar 1965; Maynard F. Hufschmidt, "Field Level of Water Resource Systems," Water Resources Research, Vol. 1, No. 2 (Second Quarter 1965); Alternatives Water Management, National Academy of Sciences and National Research Council, 1966; P.O. Wolf, "Notes on the Management of Water Resources," <u>Journal of the Institution of Water Engineers</u>, Vol. 20, No. 2 (Mar 1966); Hufschmidt, "Environmental Planning with Special Relation to Natural Resources," Jul 1966; Henry P. Caulfield, Jr., Executive Director, Water Resources Council, "The Why and the How of Comprehensive River Basin Planning," remarks at the Annual Convention, National Reclamation Association, 17 Nov 1966; Hufschmidt, "Environmental Aspects of River Basin Planning," presented at the ASCE Environmental Engineering Conference, 6-9 Feb 1967; Allen V. Kneese, "Economics and Resource Engineering," Resources for the Future, Jul 1967; remarks of Gen. William F. Cassidy, John R. Hadd, and Rodney H. Resta, before National Academy of Sciences' Committee on Water, 20 Oct 1967; Burnham H. Dodge, "Federal View of Interagency River Basin Planning," Journal of the Waterways and Harbors Division, Proceedings of the American Society of Civil Engineers (Aug 1968).

Folder 140. Report, "Colorado Choices," National Academy of Sciences, 19 May 1967.

Folder 141. Lakes, Degradation, 1967-1971.

Folder 142. Estuaries, Coastal Zones, and Wetlands, 1967-1980.

"Increasing Protection for Our Waters, Wetlands, and Shorelines: The Corps of Engineers," Committee on Government Operations, 10 Aug 1972.

Folder 143. Shoreline Erosion, 1967-1971.

Specific Purposes

This subsection contains materials on the practical application of research and technological development in water resources. Subjects included are water transportation; flood control; hydropower; rural electrification; municipal power systems; federal and state regulations; taxation and depreciation; irrigation; drainage; industrial and municipal water supplies; pollution control; waste water disposal; and river basin development.

Folders 144-146. Water Transportation, 1941-1981.

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Folder 156. Hydropower, Demand and Projections, 1948-1981.

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"Estimated Future Power Requirements of the United States," Federal Power Commission, Oct 1955; Judith D. Tendler, "Technology and Economic Development: The Case of Hydro vs. Thermal Power," Political Science Quarterly, Vol. 80, No. 2 (Jun 1965).

Folders 157-159. Hydropower, Public v. Private, 1948-1982.

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Folder 161. Hydropower, "National Power Policy: Supplemental Statement," 25 Apr 1954.

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Folders 163-164. Hydropower, Construction Under FPC License and Partnership, 1950-1983.

U.S. Supreme Court decision, <u>Chapman</u> v. <u>Federal Power Commission</u>, 16 Mar 1953; Dept. of Interior power policy, 18 Aug 1953.

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Folder 177. Hydropower, Timothy V.A. Dillon, "Federal Taxation of Income of Power Systems of the States and Their Political Subdivisions," A Study Prepared for the American Public Power Association, Nov 1952.

Folder 178. Hydropower, "Electric Power Projects Approved for Tax Certificates," 9 Jun 1951-30 Dec 1953.

Folders 179-182. Irrigation, 1944-1982.

Walter Slavik, "Reclamation's 1948-54 Long-Range Program," The Reclamation Era (Jan 1949); Clyde E. Stewart, "Successful Irrigated Farm Development -- A Problem in Control and Use of Resources," paper presented at the Meetings of the Western Farm Economics Association, 29 Jun 1950; Paul F. Healy, "Our Most Arrogant Bureaucrat," an account of Bureau of Reclamation Chief Michael Strauss, <u>Saturday Evening Post</u> (19 Apr 1952); George A. Pavelis, "Irrigation Policy and Functions," Agricultural Economics Long-Term Growth Research, Vol. 17, No. 2 (Apr 1965); Measuring the Effect of Irrigation on Rate of Technological Change, USDA Economic Report 125, Nov 1967; Soil Conservation Service National Engineering Handbook, Section 15, "Irrigation," Chapter 6, "Contour-Levee Irrigation," USDA, Jul 1969; William E. Martin and Robert A. Young, "The Need for Additional Water in the Arid Southwest: An Economist's Dissent," Annals of Regional Science, Vol. 3, No. 1 (Jun 1969); Dr. Ellis L. Armstrong, Commissioner, Bureau of Reclamation, The Bureau of Reclamation's Role in America's Growth, 26 Oct 1970; "Review and Critique: Agricultural and Water Policies and the Environment," prepared for Western Agricultural Experiment Station Directors, 1974.

Folder 183. Irrigation and Reclamation Maps, 1939-1950.

Folder 184. Wells A. Hutchins, "Irrigation Institutions--Part I: Irrigation Organizations," 1952.

Folder 185. Irrigation, "Summary--Federal Reclamation and the Crop Surplus Problem," Feb 1956.

Folder 186. Henry D. Jacoby, "Current Practice in the Evaluation of Direct Irrigation Benefits," 1 Oct 1962, Revised, 1 Jul 1963.

Folder 187. Peter Rogers and Douglas V. Smith, "An Algorithm for Irrigation Project Planning," Sep 1968.

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Folder 190. Irrigation Loan Programs, 1957-1979.

Folder 191. Irrigation in the Eastern United States, 1954-1959.

Folder 192. Acreage Limitation, 1977. (Temporarily retained by Dr. Maass.)

Folder 193. Drainage, 1945-1971.

Folder 194. Industrial and Municipal Water Supplies, 1950-1981.

Francis Bello, "How Are We Fixed for Water?," Fortune (Mar 1954); Norman Wengert, "Institutional Constraints on the Development of a Regional Water Supply System: The Case of Detroit," paper presented at the Fourth American Water Resources Conference, 18-22 Nov 1968.

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Folders 196-199. Water Pollution Control, 1937-1981.

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Folder 203. "Congressional Performance: A Case Study of National Water Pollution Control Legislation in the Post WWII Period," 1973.

Folder 204. Waste Water Disposal, 1969-1981.

Fumiko Seo, "Waste Disposal and Regional Planning," Kyoto Institute of Economic Research, May 1973.

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Folder 206. River Basin Development, Recreation, 1946-1971.

Raymond L. Anderson, "Wild Rivers: An Added Dimension in Water Resource Use," paper presented to Economics of Water Resource Development Conference, 9 Dec 1964; <u>Guidelines for Evaluating Wild</u>, Scenic and Recreational <u>River Areas</u>

Proposed for Inclusion in the National Wild and Scenic Rivers System under Section 2, Public Law 90-542, Dept. of Interior, Feb 1970.

Legislation

The records in this subsection deal with federal flood control or rivers and harbors legislation. Drafts of bills, committee reports, correspondence between the Congress and the White House, and Dr. Maass' notes on the proposed legislative initiatives comprise the bulk of the material.

- Folder 207. Flood Control Bill, 1936.
- Folder 208. Senate Joint Resolution 57, 1937.
- Folder 209. Flood Control Bill, 1938.
- Folder 210. Rivers and Harbors Legislation, 1939-1942.
- Folder 211. Flood Control Bill, 1941.
- Folder 212. Flood Control Bill, 1944.
- Folder 213. Rivers and Harbors Legislation, 1945.
- Folder 214. Flood Control Bill, 1946.
- Folder 215. Rivers and Harbors Legislation, 1946.

Folders 216-223. Flood Control and Rivers and Harbors Bills, 1948-1966.

Folder 224. River Basin Act, 1967.

Folders 225-226. Flood Control and Rivers and Harbors Bills, 1968-1972.

Folder 227. Water Resources Development Acts, 1974-1980.

Organization for Water Resources Development, 1916-1983

The material in this subsection traces proposals, successful and unsuccessful, for organizing and reorganizing federal, state, and local agencies to enhance water resources development. Special notice should be given to papers dealing with the Hoover commissions.

Folder 228. Supporting Materials for Thesis, Undated.

Specific thesis not indicated.

Folder 229. Reorganization Proposals, 1916-1947.

The 1916 congressional debate on creation of the Waterways Commission and the Board of River Regulation; Executive Reorganization Act of 1939; Dr. Maass' notes on proposed transfer of Corps of Engineers to the Dept. of Interior.

Folder 230. National Resources Planning Board, Legislation and Appropriations, 1934-1980.

Folder 231. Water Resources Committee Reports, 1935-1945.

Folder 232. Coordination of Flood Control Investigations, 1936-1943.

- Folder 233. Review of Project Reports, 1925-1944.
- Folder 234. Control Through Budget Priorities, 1934-1943.
- Folder 235. Executive Orders 8455 and 9384, 1940-1943.

Memos concerning executive orders to establish rules to govern submission of reports by construction agencies.

- Folder 236. First Hoover Commission, General, 1949-1951.
- Folder 237. "Post-Mortem on the Hoover Commission," New England Political Science Association Annual Meeting, 14 May 1949.
- Folder 238. Citizens Committee for the Hoover Report, 1949-1953.

Address by Herbert Hoover before the National Reorganization Conference, 12 Dec 1949; Status of the Hoover Report 1949-1953, Vol. 2, Sep 1953.

- Folder 239. Remarks by Dr. Maass on the Hoover Commission's Proposed Reorganization of the Army Corps of Engineers, n.d., ca. 1949.
- Folder 240. Leslie A. Miller, "The Battle That Squanders Billions," Saturday Evening Post (14 May 1949).
- Folder 241. Maass and Robert De Roos, "The Lobby That Can't Be Licked: Congress and the Army Engineers," Harper's (Aug 1949).
- Folder 242. Maass and De Roos, <u>Harper's</u> Article, Correspondence and Comments, 1949-1950.
- Folder 243. Reports on Proposed Transfer of Civil Works from Corps of Engineers to Dept. of Interior, 1950.
- Folder 244. Maass, "Congress and Water Resources," American Political Science Review, Vol. 44, No. 3 (Sep 1950).

Folder 245. Abortive Reorganization, 1952.

Correspondence, memos, newspaper clippings, and articles regarding the attempt to merge the Army Corps of Engineers with the Bureau of Reclamation.

Folder 246. Second Hoover Commission, 1953-1958.

Correspondence and newsletters concerning the findings of the Second Hoover Commission.

Folders 247-249. Reorganization Efforts, 1953-1980.

James W. Fesler, "National Water Resources Administration," Law and Contemporary Problems (Summer 1957); Henry P. Caulfield, Jr., "The Water Resources Planning Act of 1965 and Federal State Collaboration in Comprehensive Water and Related Land Resource Planning," 1965 Western Interstate Water Conference, 7 Aug 1965; testimony of Dr. Maass before the Subcommittee on Reorganization, Research, and International Organizations of the Senate Committee on Government Operations, 27 Feb 1974; testimony of S. David Freeman before the same subcommittee, 27 Feb 1974.

Folder 250. Irving K. Fox, "Administrative Arrangements for Water Resources Planning and Development," 4 Dec 1962.

Folder 251. Irving K. Fox and Lyle E. Craine, "Organizational Arrangements for Water Development," n.d., ca. 1962.

Folder 252. Report on the Dept. of Natural Resources, n.d., ca. 1971.

Folder 253. Statement on the Federal Inter-Agency River Basin Committee (FIARBC), 26 May 1949.

Folder 254. Executive Controls, FIARBC, 1944-1963.

Folder 255. Norman Blacher, "The Columbia Basin Inter-Agency Committee," Aug 1949.

Folder 256. "Evaluation of Interagency Cooperation in the Development of Water Resources," ca. 1950.

Folders 257-258. Water Resources Council, 1965-1980.

Reports from the House Committee on Interior and Insular Affairs; testimony of Prof. Maynard M. Hufschmidt before the committee, 17 May 1966; remarks of Henry P. Caulfield, Jr., Executive Director of the council, at the 16th Annual Meeting of the Manufacturing Chemists' Association, 22 Nov 1966; interview with Warren Fairchild, Director of the council from 1973-1976, "Water Resources Council in Review," Water Spectrum (Summer 1977).

Folder 259. "Congressional Handling of Water Resources," Library of Congress Legislative Reference Service, 15 Dec 1967.

Folders 260-264. Organization of the Corps of Engineers, 1949-1983.

Staff memorandum of the Central and Southern Florida Flood Control District, "The Small Projects Program of the U.S. Army Corps of Engineers," 10 Aug 1956; address of Brigadier General R.G. MacDonnell before the Association of Western State Engineers, "Budgeting for Federal Water Development Projects, "31 Aug 1960; "Now--See the Innards of a Fat Pig," Life (16 Aug 1963); "The Taxpayers' Own Diggers and Builders," Fortune (Apr 1964); Water Resources Program Memorandum, "Dept. of the Army--Corps of Engineers--Civil Works," 30 Sep 1967; memo from the Chief of Engineers to Division Engineers, "Planning, Programming and Budgeting System," 29 Nov 1967; Corps' report on long-term goals and five-year program objectives, 12 Feb 1968; Elizabeth Drew, The Story of the Army Engineers," The "Dam Outrage: Atlantic (Apr 1970); statement of Major General Frank P. Koisch, Director of Civil Works, Corps of Engineers, before the House Subcommittee on Investigations and Oversight of the Committee on Public Works, 17 Jun 1971. The material also includes a number of the Corps' "Water Resources Planners' Bulletins, " some handwritten notes by Dr. Maass, and some correspondence concerning his book about the Corps, Muddy Waters. See also Folder 488 on p. 78.

Folder 265. Notes on Organization for River Development, 6 Aug 1956.

Folder 266. "Alternative Institutional Arrangements for Managing River Basin Operations," Water Resources Council, Aug 1967.

Folder 267. Kerr Committee Investigation of Kansas Flood, 1951.

Folder 268. Jones Subcommittee Investigation to Study Civil Works Projects, 1951-1953.

Folder 269. Organization, Dept. of Interior, 1948-1982.

Minutes of a meeting of the program committee, 28 Jun 1948; Hans L. Trefousse, "Carl Schurz, the Indians, and the Public Lands," paper for American Historical Association convention, 1982.

Folder 270. Status Report, "Improvement of Programming in the Dept. of Interior," 16 Jul 1952.

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Gordon R. Clapp, "The TVA: Development of a Region," 15 Feb 1954, and "Men and Management Rebuild a River," 17 Feb 1954.

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Folder 275. Comparative Organization, 1965-1975.

Irving K. Fox, "New Horizons in Water Resources Administration," <u>Public Administration Review</u>, Vol. 25, No. 1 (Mar 1965); Frank Munger and Anne Houghton, "Politics and Organization in Water Resource Administration: A Comparative Study of Decisions," <u>Water Resources Research</u>, Vol. 1, No. 3 (Third Quarter 1965).

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Ernest A. Engelbert, "A Report on State Government Organization and Administration for Natural Resources in California," Feb 1951; Engelbert, "State Alternatives to Federal Programs for Resource Development," n.d.; William McGoldrick, "Criticisms of a Model Act for Conservation Administration," 10 Apr 1955.

Folder 277. Connecticut "Little Hoover" Commission, 1949-1953.

Final report, "Survey Unit--Number 8.b., Conservation and Development."

Folder 278. Massachusetts "Little Hoover" Commission, 1950-1960.

General Laws Relating to Marine Fish and Fisheries, as amended through 1954; Special Report of the Division of Planning in the Department of Commerce, the Department of Natural Resources, the Department of Public Works and the Metropolitan District Commission, Sitting as a Joint Board, Relative to Plans and Proposals for the Massachusetts Bay Circuit, 1956.

Folder 279. Massachusetts "Little Hoover" Commission, Personal Notes.

Folder 280. Special Districts, 1956-1962.

Stephen C. Smith, "Problems in the Use of the Public District for Ground-Water Management," Land Economics, Vol.

32, No. 3 (Aug 1956); Smith, "The Role of the Public District in the Integrated Management of Ground and Surface Water," paper presented to the Committee on the Economics of Water Resources Development, 1957.

Water Rights and Water Law

This subsection is concerned with the heritage of American water rights law, especially as passed on from England. Research material on the subject and an article by Dr. Maass and Hiller B. Zobel comprise the bulk of the papers. The conflicts between the federal, state, and interstate development of water rights laws, and international water law also are represented.

Folders 281-282. Water Rights Systems in the United States, 1952-1978.

Information Pertaining Rules, Regulations and Appropriation of Water in California, 1957; Third Annual Report of the State Water Rights Board of the State of California, Covering the Period 1 July 1958-30 June 1959; address to National Reclamation Association by Perry W. Morton, Assistant Attorney General of the United States, "Federal-State Relations in the Field of Water Rights," 29 Oct 1959; address by Kent Silverthorne, Chairman, California State Water Rights Board, before the Irrigation Districts California, "Some Accomplishments of Association Problems of the State Water Rights Board," 19 Nov 1959; Vincent Ostrom, "Property, Proprietorship and Politics: Opportunities in Structure of Strategic California Water Industry," <u>Papers</u>, Regional Science Association, Western Section, University of Oregon, 14-15 Jun 1963; Peter N. Davis, "Australian and American Water Allocation Systems Compared, Boston College Industrial and Commercial Law Review, Vol. 9, No. 3 (Spring 1968); H. Stuart Burness and James Quirk, "Appropriative Water Rights and the Efficient Allocation of Resources," Apr 1977; Burness and Quirk, "Water Law, Water Transfers and Economic Efficiency: The Colorado River, " Aug 1978.

Folder 283. Maass and Hiller B. Zobel, "Anglo-American Water Law: Who Appropriated the Riparian Doctrine?," Public Policy, Vol. 10 (1960).

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Folder 284. Maass and Zobel, Copies.

Other manuscript copies.

Folder 285. Maass and Zobel, Correspondence, 1955-1965.

Folder 286. Analysis of English Common Law of Watercourses, Notes and Correspondence, 1958.

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Folder 289. Federal, State, and Interstate Conflicts, 1951-1984.

Charles P. Schwartz, Jr., "Niagara Mohawk v. FPC: Have Private Water Rights Been Destroyed by the Federal Power Act?," University of Pennsylvania Law Review, Vol. 102, No. 1 (Nov 1953); address by Elmer Bennett, Solicitor, Dept. of Interior, at the Fall Convention of the Irrigation Districts Association of California, 12 Dec 1957; Clarence A. Davis, "Federal Encroachment on State Water Rights," address before the Section of Mineral and Natural Resources Law of the American Bar Association, 25 Aug 1958; Lois G. Forer, "Water Supply: Suggested Federal Regulation," Harvard Law Review, n.d.

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Folder 292. International Water Law and Administration, 1957-1977.

John G. Laylin, "Principles of Law Governing the Uses of International Rivers," paper prepared for the 51st Annual Meeting of the American Society of International Law, 25 Apr 1957; Second Report of the Rapporteur of the Committee on the Uses of the Waters of International Rivers, International Law Association, New York University Conference, 1958; Dante A. Caponera, The Law of International Water Resources, Nov 1970; Legal and Institutional Responses to Growing Water Demand, Food and Agriculture Organization of the United Nations, 1977.

Folder 293. Lake Lanoux Case--Decision of the Arbitral Tribunal, 16 Nov 1957.

Decision between France and Spain on the utilization of the waters of Lake Lanoux.

Folder 293A. Student Paper, 1977.

Stefano Burchi, "International Legal Aspects of Pollution of the Sea from Rivers."